IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Deenesh PADHI et al.

Serial No. 10/812,480

Filed: March 30, 2004 : Examiner:

For: SELECTIVE METAL ENCAPSULATION SCHEMES

INFORMATION DISCLOSURE STATEMENT

Group Art Unit:

Honorable Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom. Copies of any cited U.S. Patents and U.S. Patent Publications are not being submitted in accordance with 37 CFR 1.98(a)(2)(i).

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

In accordance with 37 C.F.R. § 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search had been made or that information cited is, or is considered to be, material to patentability as defined in 37 C.F.R.§ 1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of



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publication indicated for an item is taken from the face of the item, and Applicant reserves the

right to prove that the date of publication is in fact different.

The references listed on Sheet 1 of the attached PTO-1449 Forms were cited in a

patentability investigation and/or a corresponding foreign or PCT application relating to the

above-referenced application. The remaining references are from potentially related patent

applications, and possibly other sources.

No fee is believed to be required; however, the Commissioner is authorized to charge any

deficiency in any fees pursuant to 37 CFR § 1.17 associated with this communication and to

credit any excess payment to Deposit Account No. 08-0219.

Respectfully submitted,

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)			SURE	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR		SERIAL NO. 10/812,480		
				APPLICANT Deenesh PADHI et al.				
				FILING DATE March 30, 2004	4	GROUP		
			U.S. PATENT D	OCUMENTS		I		
EXAMINER'S	1	7	- 				FILING	
INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	DATE	
	3,205,485	09/07/65	Noltingk				10/21/60	
	3,229,198	01/11/66	Libby				09/28/62	
	3,767,900	10/23/73	Chao et al.				06/23/71	
	3,920,965	11/18/75	Sohrwardy				03/04/74	
	4,000,458	12/28/76	Miller et al.				08/21/75	
	4,207,520	06/10/80	Flora et al.				04/06/78	
	4,209,744	06/24/80	Gerasimov et al.			03/27/78		
	4,302,721	11/24/81	Urbanek et al.				05/15/79	
	4,368,510	01/11/83	Anderson				10/20/80	
	4,609,870	09/02/86	Lale et al.				09/13/84	
	4,616,308	10/07/86	Morshedi et a	l.			12/02/85	
	4,663,703	05/05/87	Axelby et al.				10/02/85	
	4,698,766	10/06/87	Entwistle et al	•			05/17/85	
	4,750,141	06/07/88	Judell et al.				11/26/85	
•	4,755,753	07/05/88	Chern				07/23/86	
•	4,757,259	07/12/88	Charpentier				11/05/86	
	4,796,194	01/03/89	Atherton				08/20/86	
	4,901,218	02/13/90	Cornwell				03/04/88	
	4,938,600	07/03/90	Into				02/09/89	
	4,967,381	10/30/90	Lane et al.				07/06/89	
	5,089,970	02/18/92	Lee et al.				10/05/89	
	5,108,570	04/28/92	Wang	· · · ·			03/30/90	
·	5,208,765	05/04/93	Turnbull				07/20/90	
	5,220,517	06/15/93	Sierk et al.	,			08/31/90	
	5,226,118	07/06/93	Baker et al.	-			01/29/91	
	5,231,585	07/27/93	Kobayashi et a	ıl.			06/20/90	
17	5,236,868	08/17/93	Nulman				04/20/90	
1.102 - 4	5,260,868	11/09/93	Gupta et al.				10/15/91	

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ATTY, DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 008063 USA MTCG/PINTGR 10/812,480 CITATION IN AN **APPLICATION** (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE **GROUP** March 30, 2004 **U.S. PATENT DOCUMENTS EXAMINER'S** FILING PATENT NO. SUBCLASS INITIALS DATE NAME **CLASS** DATE 5,270,222 12/14/93 Moslehi 12/31/90 5,283,141 02/01/94 03/05/92 Yoon et al. 5,295,242 03/15/94 11/02/90 Mashruwala et al. 5,309,221 05/03/94 12/31/91 Fischer et al. 5,329,463 07/12/94 01/13/93 Sierk et al. 5,338,630 08/16/94 Yoon et al. 11/18/93 5,347,446 09/13/94 Iino et al. 02/10/92 5,367,624 11/22/94 06/11/93 Cooper 5,375,064 12/20/94 Bollinger 12/02/93 5,398,336 03/14/95 Tantry et al. 06/16/93 5,402,367 03/28/95 Sullivan et al. 07/19/93 5,408,405 04/18/95 Mozumder et al. 09/20/93 5,410,473 04/25/95 Kaneko et al. 12/16/92 5,420,796 05/30/95 Weling et al. 12/23/93 5,427,878 06/27/95 **Corliss** 05/16/94 5,469,361 06/06/94 11/21/95 Moyne 5,485,082 01/16/96 Wisspeintner et al. 04/05/90 5,490,097 02/06/96 08/06/93 Swenson et al. 5,495,417 02/27/96 Fuduka et al. 03/16/93 5,497,316 03/05/96 Sierk et al. 04/04/95 5,497,381 03/05/96 O'Donoghue et al. 06/01/95 5,503,707 04/02/96 09/22/93 Maung et al. 5,508,947 04/16/96 Sierk et al. 05/13/94 5,511,005 04/23/96 Abbe et al. 02/16/94 5,519,605 05/21/96 Cawlfield 10/24/94 5,525,808 06/11/96 Irie et al. 12/20/94 5,526,293 06/11/96 Mozumder et al. 12/17/93 5,534,289 07/09/96 Bilder et al. 01/03/95 5,541,510 07/30/96 Danielson 04/06/95 **EXAMINER** DATE CONSIDERED

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)			ATTY. DOCKET I 008063 USA MT	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR		SERIAL NO. 10/812,480		
	,	<u> </u>		APPLICANT Deenesh PADHI et al.				
				FILING DATE March 30, 200	4	GROUP		
			U.S. PATENT	DOCUMENTS		<u>!</u>		
EXAMINER'S INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	FILING DATE	
	5,546,312	08/13/96	Mozumder e	t al.			02/24/94	
	5,553,195	09/03/96	Meijer				09/29/94	
	5,586,039	12/17/96	Hirsch et al.				02/27/95	
	5,599,423	02/04/97	Parker et al.				06/30/95	
	5,602,492	02/11/97	Cresswell et	al.			04/28/94	
	5,603,707	02/18/97	Trombetta et	al.			11/28/95	
	5,617,023	04/01/97	Skalski	Skalski		-	02/02/95	
	5,627,083	05/06/97	Tounai				05/12/95	
	5,629,216	05/13/97	Wijaranakula et al.				02/27/96	
	5,642,296	06/24/97	Saxena				07/29/93	
	5,646,870	07/08/97	Krivokapic e	et al.			02/13/95	
	5,649,169	07/15/97	Berezin et al				06/20/95	
	5,654,903	08/05/97	Reitman et a	1.			11/07/95	
•	5,655,951	08/12/97	Meikle et al.				09/29/95	
	5,657,254	08/12/97	Sierk et al.				04/15/96	
	5,661,669	08/26/97	Mozumder e	t al.			06/07/95	
-,	5,663,797	09/02/97	Sandhu		-		05/16/96	
	5,664,987	09/09/97	Renteln				09/04/96	
	5,665,199	09/09/97	Sahota et al.				06/23/95	
	5,666,297	09/09/97	Britt et al.				05/13/94	
	5,667,424	09/16/97	Pan	A			09/25/96	
	5,694,325	12/02/97	Fukuda et al.				11/22/95	
	5,698,989	12/16/97	Nulman				09/13/96	
	5,719,495	02/17/98	Moslehi	· • • • • • • • • • • • • • • • • • • •			06/05/96	
	5,719,796	02/17/98	Chen	· ·			12/04/95	
	5,735,055	04/07/98	Hochbein et	al.			04/23/96	
	5,740,429	04/14/98	Wang et al.				07/07/95	

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ATTY, DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 008063 USA MTCG/PINTGR 10/812,480 CITATION IN AN **APPLICATION** (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE GROUP March 30, 2004 U.S. PATENT DOCUMENTS **EXAMINER'S FILING** PATENT NO. **INITIALS** DATE **SUBCLASS** NAME **CLASS** DATE 5,751,582 05/12/98 Saxena et al. 09/24/96 5,754,297 05/19/98 Nulman 04/14/97 5,761,064 06/02/98 La et al. 10/06/95 5,761,065 06/02/98 Kittler et al. 03/30/95 5,764,543 06/09/98 06/16/95 Kennedy 5,777,901 07/07/98 Berezin et al. 09/29/95 5,787,021 07/28/98 Samaha 12/18/95 09/19/95 5,787,269 07/28/98 Hyodo 5,808,303 01/29/97 09/15/98 Schlagheck et al. 5,812,407 09/22/98 08/12/97 Sato et al. 5,823,854 10/20/98 Chen 05/28/96 5,825,913 10/20/98 Rostami et al. 07/18/95 5,828,778 10/27/98 07/12/96 Hagi et al. 5,832,224 06/14/96 11/03/98 Fehskens et al. 5,838,595 11/17/98 Sullivan et al. 11/25/96 5,844,554 12/01/98 Geller et al. 09/17/96 5,857,258 05/12/94 01/12/99 Penzes et al. 5,859,964 10/25/96 01/12/99 Wang et al. 5,859,975 08/09/96 01/12/99 Brewer et al. 02/20/97 5,862,054 01/19/99 Li 5,863,807 01/26/99 Jang et al. 03/15/96 5,867,389 02/02/99 Hamada et al. 11/26/96 5,870,306 02/09/99 Harada 06/13/97 5,883,437 03/16/99 12/28/95 Maruyama et al. 5,889,991 03/30/99 Consolatti et al. 12/06/96 5,901,313 05/04/99 Wolfe et al. 09/02/97 5,903,455 05/11/99 Sharpe, Jr. et al. 12/12/96 05/12/97 5,910,011 06/08/99 Cruse 5,910,846 08/19/97 06/08/99 Sandhu **EXAMINER DATE CONSIDERED**

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INF	INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)			ATTY. DOCKET NO. 008063 USA MTCG/PINTGR SERIAL NO. 10/812,480			
	(APPLICANT Deenesh PAI	OHI et al.	<u> </u>	
				FILING DATE March 30, 20	004	GROUP	
			U.S. PATENT I	DOCUMENTS		<u>.</u>	
EXAMINER'S	T					T	FILING
INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	DATE
	5,912,678	06/15/99	Saxena et al.				04/14/97
	5,916,016	06/29/99	Bothra				10/23/97
	5,923,553	07/13/99	Yi				10/05/96
	5,926,690	07/20/99	Toprac et al.				05/28/97
	5,930,138	07/27/99	Lin et al.				09/10/97
	5,940,300	08/17/99	Ozaki				05/08/97
	5,943,237	08/24/99	Van Boxem				10/17/97
	5,960,185	09/28/99	Nguyen				06/24/96
	5,960,214	09/28/99	Sharpe, Jr. et	al.			12/04/96
	5,961,369	10/05/99	Bartels et al.				06/04/98
	5,963,881	10/05/99	Kahn et al.	0.30 ···			10/20/97
-	5,978,751	11/02/99	Pence et al.				02/25/97
	5,982,920	11/09/99	Tobin, Jr. et a	al.			01/08/97
	6,002,989	12/14/99	Shiba et al.				04/01/97
	6,017,771	01/25/00	Yang et al.				04/27/98
-	6,036,349	03/14/00	Gombar				07/26/96
	6,041,263	03/21/00	Boston et al.				10/01/97
	6,041,270	03/21/00	Steffan et al.				12/05/97
	6,054,379	04/25/00	Yau et al.				02/11/98
	6,064,759	05/16/00	Buckley et al				11/06/97
	6,072,313	06/06/00	Li et al.				06/17/97
	6,074,443	06/13/00	Venkatesh et	al			01/29/98
	6,077,412	06/20/00	Ting et al.				10/30/98
	6,078,845	06/20/00	Friedman				11/25/96
	6,094,688	07/25/00	Mellen-Garne	ett et al	- -		03/12/98
-	6,097,887	08/01/00	Hardikar et al				10/27/97
*	6,108,092	08/22/00	Sandhu			>	06/08/99
	6,111,634	08/29/00	Pecen et al.			0	05/28/97
	6,112,130	08/29/00	Fukuda et al.				10/01/97
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ATTY, DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 008063 USA MTCG/PINTGR 10/812,480 CITATION IN AN APPLICATION (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE GROUP March 30, 2004 **U.S. PATENT DOCUMENTS EXAMINER'S** FILING PATENT NO. **SUBCLASS** INITIALS DATE NAME **CLASS** DATE 6,127,263 10/03/00 Parikh 07/10/98 6,128,016 10/03/00 12/20/96 Coelho et al. 6,136,163 10/24/00 03/05/99 Cheung et al. 6,141,660 10/31/00 07/16/98 Bach et al. 6,148,099 11/14/00 Lee et al. 07/03/97 6,148,239 11/14/00 Funk et al. 12/12/97 06/10/98 6,148,246 11/14/00 Kawazome 6,150,664 11/21/00 06/29/99 Su 12/12/00 6,159,075 10/13/99 Zhang 12/12/00 03/06/96 6,159,644 Satoh et al. 6,161,054 B1 12/12/00 Rosenthal et al. 09/17/98 6,169,931 B1 01/02/01 07/29/98 Runnels 6,172,756 B1 01/09/01 12/11/98 Chalmers et al. 6,173,240 B1 01/09/01 Sepulveda et al. 11/02/98 6,175,777 B1 01/16/01 Kim 01/16/98 6,178,390 B1 01/23/01 Jun 09/08/98 03/20/98 6,183,345 B1 02/06/01 Kamono et al. Ishihara et al. 01/31/95 6,185,324 B1 02/06/01 6,191,864 B1 02/20/01 Sandhu 02/29/00 6,192,291 B1 02/20/01 10/08/98 Kwon 6,197,604 B1 03/06/01 Miller et al. 10/01/98 6,210,983 B1 04/03/01 Atchison et al. 06/15/99 08/23/99 6,211,094 B1 04/03/01 Jun et al. 6,214,734 B1 04/10/01 Bothra et al. 11/20/98 6,217,412 B1 04/17/01 Campbell et al. 08/11/99 6,219,711 B1 04/17/01 Chari 10/01/97 6,222,936 B1 Phan et al. 09/13/99 04/24/01 **EXAMINER** DATE CONSIDERED

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				APPLICANT Deenesh PADH	I et al.		
				FILING DATE March 30, 2004		GROUP	
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EXAMINER'S	1	T	T		1	T	FILING
INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	DATE
	6,226,792 B1	05/01/01	Goiffon et al.				10/14/98
	6,230,069 B1	05/08/01	Campbell et al	•	Ì		06/26/98
	6,236,903 B1	05/22/01	Kim et al.				09/25/98
•	2001/0001755 A1	05/24/01	Sandhu et al.				12/29/00
	6,240,330 B1	05/29/01	Kurtzberg et a	l			05/28/97
,	6,240,331 B1	05/29/01	Yun				08/18/98
•	2001/0003084 A1	06/07/01	Finarov				12/04/00
	6,245,581 B1	06/12/01	Bonser et al.				04/19/00
	6,246,972 B1	06/12/01	Klimasauskas	-			05/27/99
	6,248,602 B1	06/19/01	Bode et al.				11/01/99
	6,249,712 B1	06/19/01	Boiquaye				09/25/96
	6,252,412 B1	06/26/01	Talbot et al.	. =			01/08/99
	6,253,366 B1	06/26/01	Mutschler, III				03/31/99
	6,263,255 B1	07/17/01	Tan et al.				05/18/98
-	6,271,670 B1	08/07/01	Caffey				02/08/99
	6,276,989 B1	08/21/01	Campbell et al				08/11/99
	6,278,899 B1	08/21/01	Piche et al.				10/06/98
	6,280,289 B1	08/28/01	Wiswesser et a	1.			11/02/98
	6,284,622 B1	09/04/01	Campbell et al.				10/25/99
	6,287,879 B1	09/11/01	Gonzales et al.				08/11/99
	6,290,572 B1	09/18/01	Hofmann		1		03/23/00
	6,292,708 B1	09/18/01	Allen et al.		1		06/11/98
	6,298,274 B1	10/02/01	Inoue				09/01/99
	6,298,470 B1	10/02/01	Breiner et al.				04/15/99
	6,303,395 B1	10/16/01	Nulman		 		06/01/99
	6,304,999 B1	10/16/01	Toprac et al.		 		10/23/00
	6,307,628 B1	10/23/01	Lu et al.				08/18/00
-101-01-	6,314,379 B1	11/06/01	Hu et al.				12/04/97
EXAMINER		11700/01	<u></u>	ATE CONSIDERED			12/04/97

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INF	ORMATION I CITATION APPLICA (PTO-14	IN AN TION	SURE	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR SERIAL NO. 10/812,480				
	`	<u> </u>		APPLICANT Deenesh PADHI et al.				
				FILING DATE March 30, 2004		GROUP		
		Ţ	J.S. PATENT D	OCUMENTS		l		
EXAMINER'S INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	FILING DATE	
	2001/0039462 A1	11/08/01	Mendez et al.				04/02/01	
	2001/0040997 A1	11/15/01	Tsap et al.				05/15/01	
	6,320,655 B1	11/20/01	Matsushita et	al.			03/15/00	
	2001/0042690 A1	11/22/01	Talieh				12/14/00	
·	2001/0044667 A1	11/22/01	Nakano et al.				05/16/01	
	6,324,481 B1	11/27/01	Atchison et al				06/15/99	
	6,334,807 B1	01/01/02	Lebel et al.				04/30/99	
	6,336,841 B1	01/08/02	Chang				03/29/0	
	6,340,602 B1	01/22/02	Johnson et al.				02/12/01	
	6,345,288 B1	02/05/02	Reed et al.				05/15/00	
	6,345,315 B1	02/05/02	Mishra			- 15	08/12/98	
-	6,346,426 B1	02/12/02	Toprac et al.				11/17/00	
	2002/0032499	03/14/02	Wilson et al.			<u> </u>	05/04/01	
	6,360,133 B1	03/19/02	Campbell et a	1.			06/17/99	
	6,360,184 B1	03/19/02	Jacquez				03/26/97	
	6,363,294 B1	03/26/02	Coronel et al.				12/29/98	
	6,366,934 B1	04/02/02	Cheng et al.			1	06/02/99	
	6,368,879 B1	04/09/02	Toprac				09/22/99	
	6,368,883 B1	04/09/02	Bode et al.				08/10/99	
	6,368,884 B1	04/09/02	Goodwin et al	l.			04/13/00	
	6,379,980 B1	04/30/02	Toprac				07/26/00	
	6,388,253 B1	05/14/02	Su				11/02/00	
	6,389,491 B1	05/14/02	Jacobson et al				03/23/99	
	2002/0058460 A1	05/16/02	Lee et al.				09/14/01	
	6,395,152 B1	05/28/02	Wang				07/02/99	
	6,397,114 B1	05/28/02	Eryurek et al.				05/03/99	
	6,400,162 B1	06/04/02	Mallory et al.				07/21/00	
	6,405,096 B1	06/11/02	Toprac et al.				08/10/99	
· · · · · · · · · · · · · · · · · · ·	6,405,144 B1	06/11/02	Toprac et al.	. Websen			01/18/00	

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)			SURE	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR		SERIAL NO. 10/812,480	
				APPLICANT Deenesh PAI	DHI et al.		
				FILING DATE March 30, 20	004	GROUP	
		Ţ	J.S. PATENT	DOCUMENTS		<u> </u>	····
EXAMINER'S INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS	FILING DATE
	2002/0070126 A1	06/13/02	Sato et al.				09/19/01
·	2002/0077031 A1	06/20/02	Johannson e	t al.			07/06/01
	2002/0081951 A1	06/27/02	Boyd et al.				02/20/02
	2002/0089676 A1	07/11/02	Pecen et al.	<u></u>			04/26/00
	2002/0102853 A1	08/01/02	Li et al.				12/20/01
<u>-</u>	2002/0107599 A1	08/08/02	Patel et al.				01/25/01
	2002/0107604 A1	08/08/02	Riley et al.			12/06/00	
	6,435,952 B1	08/20/02	Boyd et al.				06/30/00
	6,438,438 B1	08/20/02	Takagi et al.				01/02/98
	2002/0113039 A1	08/22/02	Mok et al.				02/16/01
	6,440,295 B1	08/27/02	Wang				02/04/00
	6,442,496 B1	08/27/02	Pasadyn et a	1.			08/08/00
	2002/0127950 A1	09/12/02	Hirose et al.				03/08/01
	2002/0128805 A1	09/12/02	Goldman et	al.			12/26/00
	2002/0149359 A1	10/17/02	Crouzen et a	1.			08/18/01
	6,470,230 B1	10/22/02	Toprac et al.				01/04/00
	6,479,990 B2	11/12/02	Mednikov et	al.			06/18/01
· · · · · ·	6,482,660 B2	11/19/02	Conchieri et	al.			03/19/01
	6,486,492 B1	11/26/02	Su				11/20/00
	6,492,281 B1	12/10/02	Song et al.				09/22/00
	2002/0193902 A1	12/19/02	Shanmugasu	ndram et al.			06/18/02
	2002/0197745 A1	12/26/02	Shanmugasu	ndram et al.			08/31/01
	2002/0197934 A1	12/26/02	Paik				11/30/01
	2002/0199082 A1	12/26/02	Shanmugasu	ndram et al.			06/18/02
EXAMINER				DATE CONSIDER	RED		

SHEET 11 OF 27

ATTY. DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 008063 USA MTCG/PINTGR 10/812,480 CITATION IN AN **APPLICATION** (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE GROUP March 30, 2004 **U.S. PATENT DOCUMENTS EXAMINER'S** FILING PATENT NO. **INITIALS** DATE SUBCLASS NAME **CLASS** DATE 01/07/03 6,503,839 B2 Gonzales et al. 07/03/01 2003/0020909 A1 01/30/03 Adams et al. 04/09/01 2003/0020928 A1 01/30/03 Ritzdorf et al. 07/09/01 6,517,413 B1 02/11/03 Hu et al. 10/25/00 6,540,591 B1 04/01/03 Pasadyn et al. 04/18/01 6,560,504 B1 05/06/03 Goodwin et al. 09/29/99 05/13/03 6,563,308 B2 Nagano et al. 03/27/01 6,567,717 B2 05/20/03 Krivokapic et al. 01/19/00 6,587,744 B1 07/01/03 06/20/00 Stoddard et al. 6,590,179 B2 07/08/03 Tanaka et al. 02/26/01 6,604,012 B1 08/05/03 Cho et al. 08/23/00 6,618,692 B2 09/09/03 Takahashi et al. 02/26/01 6,625,497 B2 09/23/03 Fairbairn et al. 07/10/01 6,640,151 B1 10/28/03 Somekh et al. 12/22/99 **EXAMINER** DATE CONSIDERED

SHEET <u>12</u> OF <u>27</u>

IN	CITA AP	TION DI ATION II PLICAT PTO-144	ION	008063 USA MTCG/PINTGR	SERIAL 10/812		
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			U.S. PATENT	T DOCUMENTS			
EXAMINER'S INITIALS	PATENT APP. NO.	FILING DATE	NAME	TITLE		CLASS	SUB- CLASS
	09/363,966	07/29/99	Arackaparambil et	Computer Integrated Manufacturing Techniques			
	09/469,227	12/22/99	Somekh et al.	Multi-Tool Control System, Method ar	nd		
	09/619,044	07/19/00	Yuan	Medium System and Method of Exporting or Importing Object Data in a Manufacturing Execution System			
	09/637,620	08/11/00	Chi et al.	Generic Interface Builder			
	09/656,031	09/06/00	Chi et al.	Dispatching Component for Associating Manufacturing Facility Service Requestors with Service Providers			
	09/655,542	09/06/00	Yuan	System, Method and Medium for Defining Palettes to Transform an Application Program Interface for a Service			
	09/725,908	11/30/00	Chi et al.	Dynamic Subject Information Generati Message Services of Distributed Objec Systems			
	09/800,980	03/08/01	Hawkins et al.	Dynamic and Extensible Task Guide			
	09/811,667	03/20/01	Yuan et al.	Fault Tolerant and Automated Comput Software Workflow	er		
	09/927,444	08/13/01	Ward et al.	Dynamic Control of Wafer Processing in Semiconductor Manufacturing Processing			
	09/928,473	08/14/01	Koh	Tool Services Layer for Providing Too Service Functions in Conjunction with Functions	1		
	09/928,474	08/14/01	Krishnamurthy et al.	Experiment Management System, Metland Medium	hod		
	09/943,383	08/31/01	Shanmugasundram et al.	In Situ Sensor Based Control of Semiconductor Processing Procedure			
	09/943,955	08/31/01	Shanmugasundram et al.	Feedback Control of a Chemical Mecha Polishing Device Providing Manipulati Removal Rate Profiles			
	09/998,372	11/30/01	Paik	Control of Chemical Mechanical Polish Pad Conditioner Directional Velocity to Improve Pad Life			
	09/998,384	11/30/01	Paik	Feedforward and Feedback Control for Conditioning of Chemical Mechanical Polishing Pad			
EXAMINER				DATE CONSIDERED			

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ATTY, DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 008063 USA MTCG/PINTGR 10/812,480 CITATION IN AN **APPLICATION** (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE GROUP March 30, 2004 **U.S. PATENT DOCUMENTS EXAMINER'S** PATENT FILING SUB-INITIALS APP. NO. DATE NAME TITLE **CLASS CLASS** 10/084,092 02/28/02 Arackaparambil et Computer Integrated Manufacturing **Techniques** 10/100,184 03/19/02 Al-Bayati et al. Method, System and Medium for Controlling Semiconductor Wafer Processes Using Critical Dimension Measurements 10/135,405 05/01/02 Reiss et al. Integration of Fault Detection with Run-to-Run Control 10/135,451 05/01/02 Shanmugasundram Dynamic Metrology Schemes and Sampling Schemes for Advanced Process Control in et al. Semiconductor Processing 10/172,977 | 06/18/02 Shanmugasundram Method, System and Medium for Process Control for the Matching of Tools, et al. Chambers and/or Other Semiconductor-Related Entities 10/173,108 06/18/02 Shanmugasundram Integrating Tool, Module, and Fab Level et al. Control 10/174,370 | 06/18/02 Shanmugasundram Feedback Control of Plasma-Enhanced et al. Chemical Vapor Deposition Processes 10/174,377 06/18/02 Schwarm et al. Feedback Control of Sub-Atmospheric Chemical Vapor Deposition Processes 10/377,654 03/04/03 Kokotov et al. Method, System and Medium for Controlling Manufacturing Process Using Adaptive Models Based on Empirical Data 10/393,531 03/21/03 Shanmugasundram Copper Wiring Module Control et al. 08/01/03 Schwarm et al. 10/632,107 Method, System, and Medium for Handling Misrepresentative Metrology Data Within an Advanced Process Control System 10/665,165 09/18/03 Paik Feedback Control of a Chemical Mechanical Polishing Process for Multi-Layered Films 10/712.273 11/14/03 Kokotov Method, System and Medium for Controlling Manufacture Process Having **Multivariate Input Parameters** 10/759,108 01/20/04 Automated Design and Execution of Schwarm Experiments with Integrated Model Creation for Semiconductor Manufacturing Tools 10/765,921 01/29/04 Schwarm System, Method, and Medium for Monitoring Performance of an Advanced Process Control System **EXAMINER** DATE CONSIDERED

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			U.S. PATEN	VT D	OCUMENTS					
EXAMINER'S INITIALS	PATENT APP. NO.	FILING DATE	NAME		TITLE	CLASS	SUB- CLASS			
	10/809,906		Surana et al.	Se M	Technique for Process-Qualifying emiconductor Manufacturing Tool etrology Data					
	10/809,908	03/26/04	Yang et al.	Se	Improved Control of Metal Resistance in Semiconductor Products via Integrated Metrology					
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ATTY. DOCKET NO. SERIAL NO. INFORMATION DISCLOSURE 008063 USA MTCG/PINTGR 10/812,480 CITATION IN AN **APPLICATION** (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE GROUP March 30, 2004 FOREIGN PATENT DOCUMENTS **EXAMINER'S** PATENT NO. COUNTRY DATE CLASS **SUBCLASS** Translation **INITIALS** Yes No EP 0 869 652 A2 10/07/98 Europe X WO 98/45090 10/15/98 wo $\overline{\mathbf{X}}$ EP 0 877 308 A2 11/11/98 Europe X EP 0 881 040 A2 12/02/98 Europe X EP 0 895 145 A1 02/03/99 Europe X WO 99/09371 02/25/99 wo X 11-67853 03/09/99 Japan X EP 0 910 123 A1 04/21/99 Europe X ١ 11-126816 05/11/99 X Japan 11-135601 05/21/99 X Japan WO 99/25520 05/27/99 wo $\overline{\mathbf{x}}$ EP 0 932 194 A1 07/28/99 X Europe WO 99/59200 11/18/99 WO X WO 00/00874 01/06/00 WO X WO 00/05759 02/03/00 WO X WO 00/35063 06/15/00 WO X 2000-183001 06/30/00 Japan X WO 00/54325 WO 09/14/00 X GB 2 347 885 A 09/20/00 United Kingdom X WO 00/79355 A1 wo 12/28/00 X EP 1 066 925 A2 01/10/01 Europe X 1 EP 1 067 757 A1 01/10/01 Europe X EP 1 071 128 A2 01/24/01 Europe X WO 01/11679 A1 02/15/01 WO X WO 01/15865 A1 03/08/01 WO X 9 WO 01/18623 A1 03/15/01 WO X **EXAMINER DATE CONSIDERED**

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SERIAL NO. INFORMATION DISCLOSURE ATTY. DOCKET NO. 008063 USA MTCG/PINTGR 10/812,480 CITATION IN AN APPLICATION (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE GROUP March 30, 2004 FOREIGN PATENT DOCUMENTS **EXAMINER'S** PATENT NO. DATE COUNTRY CLASS SUBCLASS Translation INITIALS Yes No 61-66104 04/04/86 Japan X 61-171147 08/01/86 Japan X 01-283934 11/15/89 Japan X 0 397 924 A1 11/22/90 Europe X 2,050,247 08/29/91 Canada X 1 2,165,847 08/29/91 X Canada 08/29/91 2,194,855 Canada X 3-202710 09/04/91 Japan X t 05-151231 06/18/93 Japan X 05-216896 08/27/93 X Japan 05-266029 10/15/93 Japan X 06-110894 04/22/94 ſ Japan X 06-176994 06/24/94 Japan X 1. 06-184434 07/05/94 Japan X 06-252236 09/09/94 Japan X 06-260380 09/16/94 Japan X EP 0 621 522 A2 10/26/94 Europe X ٨ WO 95/34866 12/21/95 wo X 08-50161 02/20/96 Japan X 08-149583 06/07/96 Japan X 08-304023 11/22/96 Japan X EP 0 747 795 A2 12/11/96 Europe X 02/07/97 09-34535 Japan X WO 98/05066 02/05/98 WO X 1 10-34522 02/10/98 Japan X 10-173029 06/26/98 Japan X **EXAMINER** DATE CONSIDERED

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EXAMINER'S INITIALS	PATENT NO.	DATE		NAME	CLASS	SUBCLASS		ING ATE
	5,674,787	10/07/97	Zhao et al.				01/16	/96
	6,143,646	11/07/00	Wetzel				06/03	/97
·	6,204,165 B1	03/20/01	Ghoshal				06/24	/99
	2001/0030366 A1	10/18/01	Nakano et al.			03/07/01		
	6,455,937 B1	09/24/02	Cunningham			03/17/99		
	6,479,902 B1	11/12/02	Lopatin et al.			06/29	/00	
	2002/0185658 A1	12/12/02	Inoue et al.				06/14	/01
· · · · · · · · · · · · · · · · · · ·	<u> </u>	FOR	EIGN PATENT	DOCUMENTS			<u> </u>	
EXAMINER'S	PATENT NO.	DATE		OUNTRY	CLASS	SUBCLASS	1	
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	8-23166	01/23/96	Japan				X	
	9-246547	09/19/97	Japan				X	
				itle, Date, Pertiner				
· · · · · · · · · · · · · · · · · · ·	Itabashi, Takeyuki, Copper Diffusion B	arrier Metal.'	' IEEE Internati	onal Interconnect T	Technology Con	<i>iference</i> , pp. :	285-28	7.
	Cunningham, James insite.net/semicondu					nnects." <htt< td=""><td>p://ww</td><td>w.e-</td></htt<>	p://ww	w.e-

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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SHEET 17 OF 27

IN	INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)				ET NO. MTCG/PINTGI	SERIAL 10/812	NO.		
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EXAMINER'S INITIALS	PATENT NO.	DATE		COUNTRY	CLASS	SUBCLASS	Tran:	slation No	
	2001-76982	03/23/01	Japan	·			x		
	WO 01/25865 A1	04/12/01	wo				X		
	EP 1 092 505 A2	04/18/01	Europe				X	-	
	WO 01/33277 A1	05/10/01	wo				X		
	WO 01/33501 A1	05/10/01	wo				X		
	434103	05/16/01	Taiwan				X		
·	436383B	05/28/01	Taiwan				х		
•	WO 01/52055 A3	07/19/01	WO.				х		
•	WO 01/52319 A1	07/19/01	wo				х		
•	WO 01/57823 A2	08/09/01	WO				х		
	455938B	09/21/01	Taiwan			•	Х		
	455976	09/21/01	Taiwan	,			х		
	2001-284299	10/12/01	Japan				Х		
	WO 01/80306 A2	10/25/01	wo			-	X		
	2001-305108	10/31/01	Japan				X		
	EP 1 072 967 A3	11/21/01	Europe				Х		
	2002-9030	01/11/02	Japan				X		
7	EP 1 182 526 A2	02/27/02	Europe				X		
7	WO 02/17150 A1	02/28/02	wo				X		
	WO 02/31613 A2	04/18/02	wo	•			X		
	WO 02/31613 A3	04/18/02	WO				X		
	WO 02/33737 A2	04/25/02	wo				X		
	WO 02/074491 A1	09/26/02	wo				X		
	2002-343754	11/29/02	Japan				X		
XAMINER		1970		DATE CONSII	DERED				

SHEET 18 OF 27

		EET <u>18</u> OF <u>27</u>						
INFORMATION DISCLOSURE CITATION IN AN	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR	SERIAL NO. 10/812,480						
APPLICATION (PTO-1449)								
(1011)	APPLICANT	L						
	Deenesh PADHI et al.							
	FILING DATE March 30, 2004	GROUP						
OTHER ART (Including Author	r, Title, Date, Pertinent Pages, Etc.)							
Miller, G. L., D. A. H. Robinson, and J. D. Wile conductivity by radio frequency-free-carrier pow 805.	y. July 1976. "Contactless measureme ver absorption." <i>Rev. Sci. Instrum.</i> , Vo	nt of semiconductor lume 47, No. 7. pp. 799 –						
Ostanin, Yu.Ya. October 1981. "Optimization of Coatings with Laid-on Eddy-Current Transducer Moscow, USSR.	rs (Abstract)." Defektoskopiya, vol. 17	7, no. 10, pp. 45-52.						
February 1984. "Method and Apparatus of in Si and Repeat Lithographic Cameras." <i>IBM Techn</i> February 1984. "Substrate Screening Process."	ical Disclosure Bulletin, pp. 4855-485	9.						
October 1984. "Method to Characterize the Stab Technical Disclosure Bulletin, pp. 2857-2860.	February 1984. "Substrate Screening Process." <i>IBM Technical Disclosure Bulletin</i> , pp. 4824-4825. October 1984. "Method to Characterize the Stability of a Step and Repeat Lithographic System." <i>IBM Technical Disclosure Bulletin</i> , pp. 2857-2860.							
Levine, Martin D. 1985. Vision in Man and Ma	chine. New York: McGraw-Hill, Inc.	pp. ix-xii, 1-58.						
Herrmann, D. 1988. "Temperature Errors and V Vibrations (Abstract)." <i>Technisches Messen</i> TM ,	Vays of Elimination for Contactless M vol. 55, no. 1, pp. 27-30. West Germa	easurement of Shaft ny.						
Lin, Kuang-Kuo and Costas J. Spanos. Novemb Manufacturing: An Application for LPCVD." III pp. 216-229.	er 1990. "Statistical Equipment Mode	eling for VLSI						
Runyan, W. R., and K. E. Bean. 1990. "Semicon Reading, Massachusetts: Addison-Wesley Publis	shing Company.							
Chang, Norman H. and Costas J. Spanos. Februa Integration: An LPCVD Application." <i>IEEE Tra</i> 51.	ary 1991. "Continuous Equipment Dia Insactions on Semiconductor Manufac	agnosis Using Evidence turing, v. 4, n. 1, pp. 43-						
Larrabee, G. B. May 1991. "The Intelligent Mic International Semiconductor Manufacturing Scient								
Burke, Peter A. June 1991. "Semi-Empirical Medium Planarization." VMIC Conference, 1991 IEEE, p	odelling of SiO2 Chemical-Mechanica pp. 379-384. IEEE.	l Polishing						
Zorich, Robert. 1991. Handbook of Quality Integ		6.24.42						
Rampalli, Prasad, Arakere Ramesh, and Nimish S Application for Managing Equipment Reliability New York: IEEE.	and Availability in the Semiconductor	Industry. New York,						
May 1992. "Laser Ablation Endpoint Detector."	IBM Technical Disclosure Bulletin, p	рр. 333-334.						
Spanos, Costas J., Hai-Fang Guo, Alan Miller, ar Statistical Process Control Using Tool Data." <i>IE</i> pp. 308-318.								
February 1993. "Electroless Plating Scheme to F Bulletin, pp. 405-406.		BM Technical Disclosure						
EXAMINER	DATE CONSIDERED							

SHEET 19 OF 27

		EET 19 OF 27						
INFORMATION DISCLOSURE CITATION IN AN APPLICATION	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR	SERIAL NO. 10/812,480						
(PTO-1449)								
	APPLICANT Deenesh PADHI et al.							
	FILING DATE	GROUP						
	March 30, 2004	GROUP						
Scarr, J. M. and J. K. Zelisse. April 1993. "New (Abstract)." Proceedings of the 36th Annual Technology.	v Topology for Thickness Monitoring hnical Conference, Dallas, Texas.	Eddy Current Sensors						
Hu, Albert, Kevin Nguyen, Steve Wong, Xiuhua Deployment of Run by Run Controller Using SC Manufacturing Science Symposium. pp. 126-13	Zhang, Emanuel Sachs, and Peter Re C Framework." IEEE/SEMI Internat							
Matsuyama, Akira and Jessi Niou. 1993. "A Sta Japan." IEEE/SEMI International Semiconducto	ate-of-the-Art Automation System of	an ASIC Wafer Fab in						
Yeh, C. Eugene, John C. Cheng, and Kwan Won System for Wafer Fabrication." <i>IEEE/CHMT In</i> . pp. 438-442.	g. 1993. "Implementation Challenge ternational Electronics Manufacturing	s of a Feedback Control g Technology Symposium,						
Kurtzberg, Jerome M. and Menachem Levanoni. IBM Journal of Research and Development, v. 3		trol for Manufacturing."						
Mozumder, Purnendu K. and Gabriel G. Barna. Process." IEEE Transactions on Semiconductor	February 1994. "Statistical Feedback	Control of a Plasma Etch						
Muller-Heinzerling, Thomas, Ulrich Neu, Hans C Controlled Operation of Batch Processes with Ba 3, pp. 43-51.	Georg Nurnberg, and Wolfgang May.							
Stoddard, K., P. Crouch, M. Kozicki, and K. Tsa. Adaptive Feedback Control to Semiconductor De American Control Conference – ACC '94, vol. 1,	evice Manufacturing (Abstract)." Pro							
Rocha, Joao and Carlos Ramos. September 12, 1 Systems." Intelligent Robots and Systems '94. As Proceedings of the IEEE/RSJ/GI International Control New York: IEEE. pp. 105-112.	dvanced Robotic Systems and the Rea	l World, IROS '94.						
Schaper, C. D., M. M. Moslehi, K. C. Saraswat, a and Control of Rapid Thermal Processing System 141, no. 11, pp. 3200-3209.	and T. Kailath. November 1994. "Mons (Abstract)." Journal of the Electron	odeling, Identification, chemical Society, vol.						
Tao, K. M., R. L. Kosut, M. Ekblad, and G. Aral. Semiconductor Wafers (Abstract)." <i>Proceedings</i> pp. 67-72. Lake Buena Vista, Florida.	of the 33 rd IEEE Conference on Deci	sion and Control, vol. 1,						
Hu, Albert, He Du, Steve Wong, Peter Renteln, a Controller to the Chemical-Mechanical Planariza Manufacturing Technology Symposium, pp. 371-3	tion Process." IEEE/CPMT Internation							
Spanos, C. J., S. Leang, SY. Ma, J. Thomson, B Controller for Photolithographic Operations (Abs Diagnostics, and Modeling in Semiconductor Ma	tract)." Proceedings of the Symposium							
Moyne, James, Roland Telfeyan, Arnon Hurwitz, Run-to-Run Controller and Its Application to Che Semiconductor Manufacturing Conference and W	Moyne, James, Roland Telfeyan, Arnon Hurwitz, and John Taylor. August 1995. "A Process-Independent Run-to-Run Controller and Its Application to Chemical-Mechanical Planarization." SEMI/IEEE Advanced Semiconductor Manufacturing Conference and Workshop. Ann Arbor, Michigan: The University of Michigan Electrical Engineering & Computer Science Center for Display Technology & Manufacturing.							
Zhou, Zhen-Hong and Rafael Reif. August 1995. Transform Infrared Spectroscopy—Part II: Real-Transactions on Semiconductor Manufacturing, V	"Epi-Film Thickness Measurements Fime in Situ Process Monitoring and C	Using Emission Fourier						
	DATE CONSIDERED							

SHEET 20 OF 27

INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR	SERIAL NO. 10/812,480
	APPLICANT Deenesh PADHI et al.	
	FILING DATE March 30, 2004	GROUP .
OTHER ART (Including Auth	or, Title, Date, Pertinent Pages, Etc.)	
Telfeyan, Roland, James Moyne, Nauman Cha Moyne, Arnon Hurwitz, and John Taylor. Oct Chemical-Mechanical Planarization Process." American Vacuum Society.	tober 1995. "A Multi-Level Approach to Minneapolis, Minnesota: 42 nd National	o the Control of a Symposium of the
Chang, E., B. Stine, T. Maung, R. Divecha, D. Nakagawa, S. Oh, and D. Bartelink. December Systematic and Random Sources of Die- and Washington, D.C.: International Electron Devi	er 1995. "Using a Statistical Metrology I Wafer-level ILD Thickness Variation in G	Framework to Identify
Moyne, James R., Nauman Chaudhry, and Rol Run-to-Run Controller for Plasma Etching." Jo University of Michigan Display Technology M	land Telfeyan. 1995. "Adaptive Extensiournal of Vacuum Science and Technolo Manufacturing Center.	ogy. Ann Arbor, Michigan:
Schmid, Hans Albrecht. 1995. "Creating the Austin, Texas: OOPSLA.	Architecture of a Manufacturing Framev	work by Design Patterns.
Dishon, G., M. Finarov, R. Kipper, J.W. Curry February 1996. "On-Line Integrated Metrolog Speciality Conferences, 1st International CMP Leang, Sovarong, Shang-Yi Ma, John Thomso	gy for CMP Processing." Santa Clara, Control Planarization Conference.	alifornia: VMIC
Control System for Photolithographic Sequence no. 2.	ees." IEEE Transactions on Semiconduc	ctor Manufacturing, vol. 9,
Smith, Taber, Duane Boning, James Moyne, A CMP Pad Wear Using Run by Run Feedback C International VLSI Multilevel Interconnection	Control." Santa Clara, California: Proced Conference. pp. 437-439.	edings of the Thirteenth
Boning, Duane S., William P. Moyne, Taber H. Shellman, and John Taylor. October 1996. "R Transactions on Components, Packaging, and	Run by Run Control of Chemical-Mechan Manufacturing Technology—Part C, vo	nical Polishing." <i>IEEE</i> bl. 19, no. 4, pp. 307-314.
Zhe, Ning, J. R. Moyne, T. Smith, D. Boning, Comparative Analysis of Run-to-Run Control (Abstract)." <i>IEEE/SEMI 1996 Advanced Semi</i>	Algorithms in Semiconductor Manufactor Manufactor Manufacturing Conference W	uring Industry orkshop, pp. 375-381.
Yasuda, M., T. Osaka, and M. Ikeda. December for Disturbance Suppression (Abstract)." <i>Proceed</i> vol. 2, pp. 1229-1233. Kobe, Japan.	ceeding of the 35 th IEEE Conference on I	Decision and Control,
Fan, Jr-Min, Ruey-Shan Guo, Shi-Chung Chan Sequence-Disordered Data Using EWMA Met Conference, pp. 169-174.	hod." IEEE/SEMI Advanced Semicondu	uctor Manufacturing
SEMI. [1986] 1996. "Standard for Definition a Maintainability (RAM)." SEMI E10-96.		
Smith, Taber and Duane Boning. 1996. "A Se Function Approximation Techniques." <i>IEEE/C Symposium</i> , pp. 355-363.	If-Tuning EWMA Controller Utilizing ACPMT International Electronics Manufa	Artificial Neural Network ecturing Technology
EXAMINER	DATE CONSIDERED	

SHEET 21 OF 27

INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR	SERIAL NO. 10/812,480	
	APPLICANT Deenesh PADHI et al.		
	FILING DATE March 30, 2004	GROUP	
OTHER ART (Including Author,	Title, Date, Pertinent Pages, Etc.)	<u> </u>	
Guo, Ruey-Shan, Li-Shia Huang, Argon Chen, and Methodology for a Run-by-Run EWMA Controlle Manufacturing, pp. 61-64.	r." 6 th International Symposium on .	Semiconductor	
Mullins, J. A., W. J. Campbell, and A. D. Stock. C Run-to-Run Processing in Semiconductor Manufac International Society for Optical Engineering Con	cturing (Abstract)." Proceedings of	odel Predictive Control in the SPIE – The	
Reitman, E. A., D. J. Friedman, and E. R. Lory. N Multiple-System Models for Yield Analysis (Abstr vol. 10, no. 4, pp. 469-481.	ovember 1997. "Pre-Production Regract)." <i>IEEE Transactions on Semic</i>	onductor Manufacturing,	
Durham, Jim and Myriam Roussel. 1997. "A Stat Yield." IEEE/SEMI Advanced Semiconductor Ma		ne Defectivity to Probe	
Shindo, Wataru, Eric H. Wang, Ram Akella, and A Isolation in Defect Inspection and Classification." 93.	Andrzej J. Strojwas. 1997. "Excursion of the International Workshop on Stational Workshop on Station of the International Workshop on Station of the Internation of the	stical Metrology, pp. 90-	
Van Zant, Peter. 1997. Microchip Fabrication: A F pp. 472-478. New York, New York: McGraw-Hill			
Campbell, W. Jarrett, and Anthony J. Toprac. Feb Manufacturing." Advanced Micro Devises, TWM	CC.		
Edgar, Thomas F., Stephanie W. Butler, Jarrett Car K.S. Balakrishnan. May 1998. "Automatic Contro and Possibilities." Automatica, Vol. 36, pp. 1567-	ol in Microelectronics Manufacturing 1603, 2000.	g: Practices, Challenges,	
Moyne, James, and John Curry. June 1998. "A Fu Santa Clara, California: VLSI Multilevel Interconn		al Planarization Process."	
July 1998. "Active Controller: Utilizing Active Da Semiconductor Manufacturing (Abstract)." <i>IEEE Technology—Part C</i> , vol. 21, no. 3, pp. 217-224.	July 1998. "Active Controller: Utilizing Active Databases for Implementing Multistep Control of Semiconductor Manufacturing (Abstract)." IEEE Transactions on Components, Packaging and Manufacturing		
	SEMI. July 1998. New Standard: Provisional Specification for CIM Framework Domain Architecture. Mountain View, California: SEMI Standards. SEMI Draft Doc. 2817.		
Consilium. August 1998. Quality Management Component: QMC TM and QMC-Link TM Overview. Mountain View, California: Consilium, Inc.			
Chemali, Chadi El, James Moyne, Kareemullah Kh Sokol, and Tarun Parikh. November 1998. "Multi and Post-Measurement Strategy." Seattle, Washing	zone Uniformity Control of a CMP ligton: SEMETECH Symposium.	Colt, Jonathan Chapple- Process Utilizing a Pre	
Consilium. 1998. FAB300 TM . Mountain View, Cal	<u> </u>		
Fang, S. J., A. Barda, T. Janecko, W. Little, D. Out Birang. 1998. "Control of Dielectric Chemical Me Endpoint Sensor." <i>International Proceedings of the</i>	echanical Polishing (CMP) Using an e IEEE Interconnect Technology Co	d Interferometry Based inference, pp. 76-78.	
	Khan, Kareemullah, Victor Solakhain, Anthony Ricci, Tier Gu, and James Moyne. 1998. "Run-to-Run Contro of ITO Deposition Process." Ann Arbor, Michigan.		
EXAMINER D	ATE CONSIDERED		

SHEET 22 OF 27

		EET 22 OF 27
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (PTO-1449)	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR	SERIAL NO. 10/812,480
	APPLICANT Deenesh PADHI et al.	
	FILING DATE March 30, 2004	GROUP
OTHER ART (Including Author	Title, Date, Pertinent Pages, Etc.)	<u> </u>
Ouma, Dennis, Duane Boning, James Chung, Gr Characterization and Modeling Methodology for International Interconnect Technology Conferen	eg Shinn, Leif Olsen, and John Clark. CMP Dielectric Planarization." <i>Procee</i> , pp. 67-69.	ceedings of the IEEE 1998
Suzuki, Junichi and Yoshikazu Yamamoto. 1998 of UML, XML, DOM and CORBA." Proceeding Symposium. pp. 1-10.	gs IEEE International Software Engin	eering Standards
Consilium. January 1999. "FAB300™: Consilium which Control and Automate Real-Time FAB Opwww.consilium.com/products/fab300_page.htm#	perations."	Software and Services
Boning, Duane S., Jerry Stefani, and Stephanie V Semiconductor Manufacturing." Encyclopedia o	f Electrical Engineering, J. G. Webste	er, Ed.
McIntosh, John. March 1999. "Using CD-SEM <i>JOM</i> , vol. 51, no. 3, pp. 38-39.		
Pan, J. Tony, Ping Li, Kapila Wijekoon, Stan Tsa and Time Dependent Pattern Effect." <i>IEEE 1999</i> 166.		
Klein, Bruce. June 1999. "Application Developed Informationweek. pp. 1A-6A.	and the control of th	
Baliga, John. July 1999. "Advanced Process Co International. www.semiconductor.net/semicond	luctor/issues/issues/1999/jul99/docs/fe	eature 1.asp
Consilium. July 1999. "Increasing Overall Equipole Implementing Consilium's Next-Generation Man Fabtech Edition 10.		
Meckl, P. H. and K. Umemoto. August 1999. "A Machinery (Abstract)." Proceedings of the 1999 1, pp. 725-729. Kohala Coast, HI.	IEEE International Conference on Co	
Consilium Corporate Brochure. October 1999. Whan, K., C. El Chemali, J. Moyne, J. Chapple-Se "Yield Improvement at the Contact Process Through Electronics Manufacturing Technology Symposium."	okol, R. Nadeau, P. Smith, C., and T. ugh Run-to-Run Control (Abstract)."	Parikh. October 1999. 24 th IEEE/CPMT
Moyne, James. October 1999. "Advancements in paper and presentation to) Third International Symmetry Manufacturing: 196 th Meeting of the Electrochem	n CMP Process Automation and Cont mposium on Chemical Mechanical Po nical Society.	lishing in IC Device
Williams, Randy, Dadi Gudmundsson, Kevin Mo Shanthikumar. October 1999. "Optimized Sample Manufacturing Conference Proceedings, 1999 IE NJ. pp. 43 – 46.	e Planning for Wafer Defect Inspection EE International Symposium on Santa	n," Semiconductor
EXAMINER	DATE CONSIDERED	

SHEET 23 OF 27

	SHE	EET <u>23</u> OF <u>27</u>
INFORMATION DISCLOSURE CITATION IN AN APPLICATION	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR	SERIAL NO. 10/812,480
(PTO-1449)	1	
(2.10.11.0)	APPLICANT	
	Deenesh PADHI et al.	
	FILING DATE March 30, 2004	GROUP
OTHER ART (Including Author,	Title, Date, Pertinent Pages, Etc.)	``
Consilium. November 1999. FAB300™ Update.		C. A. HALL
Ruegsegger, Steven, Aaron Wagner, James S. Free "Feedforward Control for Reduced Run-to-Run V Transactions on Semiconductor Manufacturing, v. 1999. "Contactless Bulk Resistivity/Sheet Resistant Contactless Bulk Resistivity	ariation in Microelectronics Manufa ol. 12, no. 4.	cturing." IEEE
www.Lehighton.com/fabtech1/index.html. November 1999. "How to Use EWMA to Achieve Contribution to the Infrastructure Safety Systems, http://www.ndt.net/abstract/ndtiss99/data/35.htm	Tores, Brazil.	onal Symposium on NDT
Edgar, T. F., W. J. Campbell, and C. Bode. Decer Manufacturing." <i>Proceedings of the 38th IEEE Co</i> pp. 4185-4191.	onference on Decision and Control, I	Phoenix, Arizona, vol. 4,
Meckl, P. H. and K. Umemoto. April 2000. "Ach [Semiconductor Manufacturing Machine] (Abstract 237.		
Chemali, Chadi El, James Moyne, Kareemullah K Sokol, and Tarun Parikh. July/August 2000. "Mu Polishing Process Utilizing a Pre- and Postmeasure 1287-1296. American Vacuum Society.	Iltizone Uniformity Control of a Che	mical Mechanical
Oechsner, R., T. Tschaftary, S. Sommer, L. Pfitzner 2000. "Feed-forward Control for a Lithography/E International Society for Optical Engineering Con	tch Sequence (Abstract)." Proceedi	
Cheung, Robin. October 18, 2000. "Copper Inter-Clara, CA.		ser Group Meeting, Santa
Edgar, Thomas F., Stephanie W. Butler, W. Jarrett Hwang, K. S. Balakrishnan, and J. Hahn. Novemb Manufacturing: Practices, Challenges, and Possibi	per 2000. "Automatic Control in Mi	croelectronics
Khan, S., M. Musavi, and H. Ressom. November Manufacturing (Abstract)." ANNIE 2000. Smart E Louis, Missouri.	2000. "Critical Dimension Control	in Semiconductor
ACM Research Inc. 2000. "Advanced Copper Months." Achter://acmrc.com/press/ACM-ECP-brochure.pdf>		eyond."
Ravid, Avi, Avner Sharon, Amit Weingarten, Vlac CMP Planarity Control Using ITM." IEEE/SEMI 437-443.	limir Machavariani, and David Sche	
SEMI. 2000. "Provisional Specification for CIM SEMI E105-1000.	Framework Scheduling Component.	" San Jose, California.
2000. "Microsense II Capacitance Gaging System.	" www.adetech.com.	
Chen, Argon and Ruey-Shan Guo. February 2001 to CMP Processes." <i>IEEE Transactions on Semico</i>		
	DATE CONSIDERED	

SHEET 24 OF 27

CITATION IN AN APPLICATION (PTO-1449) APPLICANT Deenesh PADHI et al. FILING DATE March 30, 2004 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film point Control System." http://www.kla-tencor.com/j/servlet/Newsltem?newsltemID=74. Lee, Brian, Duane S. Boning, Winthrop Baylies, Noel Poduje, Pat Hester, Yong Xia, John V Koliopoulus, Dale Hetherington, HongJiang Sun, and Michael Lacy. April 2001. "Wafer N. Effects on CMP: Experimental Validation of Modeling Methods." San Francisco, California Research Society Spring Meeting. Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Re Automated Image Retrieval System (Abstract)." Advanced Semiconductor Manufacturing CIEEE/SEMI, Munich, Germany. Tan, K. K., H. F. Dou, and K. Z. Tang. May-June 2001. "Precision Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Electronic Components Conference 2001. Proceedings, pp. 1372-1379. Orlando, Florida. Jensen, Alan, Peter Renteln, Stephen Jew, Chris Raeder, and Patrick Cheung. June 2001. "E Modeling for Control of CMP Removal Uniformity." Solid State Technology, Vol. 44, No. 6 106. Cowan Publ. Corp.: Washington, D.C. July 5, 2001. "Motorola and Advanced Micro Devices Buy ObjectSpace Catalyst Advanced	IAL NO. 812,480
APPLICANT Deenesh PADHI et al. FILING DATE March 30, 2004 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film point Control System." http://www.kla-tencor.com/j/servlet/News/tem?news/temlD=74. Lee, Brian, Duane S. Boning, Winthrop Baylies, Noel Poduje, Pat Hester, Yong Xia, John V Koliopoulus, Dale Hetherington, HongJiang Sun, and Michael Lacy. April 2001. "Wafer Notes of Composition of Modeling Methods." San Francisco, California Research Society Spring Meeting. Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Reautomated Image Retrieval System (Abstract)." Advanced Semiconductor Manufacturing Confective Manufacturing (Abstract). "Advanced Semiconductor Manufacturing Composition Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Electronic Composition Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract). "51st Electronic Composition Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Electronic Composition Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract). "51st Electronic Composition Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Electronic Composition Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract). "51st Electronic Composition Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Electronic Composition Motion Control System Semiconductor and Electronic Composition Motion Control System Semiconductor and Electronic Composition Motion Control System Semiconductor and Electronic Composition Motion Control System Semiconductor Manufacturing (Abstract)." 51st Electronic Composition Motion Control System Semiconductor Manufacturing (Abstract)." 51st Electronic Composition Motion Control System Sem	012,100
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film point Control System." http://www.kla-tencor.com/j/servlet/Newsltem?newsltemID=74. Lee, Brian, Duane S. Boning, Winthrop Baylies, Noel Poduje, Pat Hester, Yong Xia, John V Koliopoulus, Dale Hetherington, HongJiang Sun, and Michael Lacy. April 2001. "Wafer N. Effects on CMP: Experimental Validation of Modeling Methods." San Francisco, California Research Society Spring Meeting. Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Re Automated Image Retrieval System (Abstract)." Advanced Semiconductor Manufacturing Collect/SeMI, Munich, Germany. Tan, K. K., H. F. Dou, and K. Z. Tang. May-June 2001. "Precision Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Electronic Com	
March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film point Control System." http://www.kla-tencor.com/j/servlet/NewsItem?newsItemID=74. Lee, Brian, Duane S. Boning, Winthrop Baylies, Noel Poduje, Pat Hester, Yong Xia, John V Koliopoulus, Dale Hetherington, HongJiang Sun, and Michael Lacy. April 2001. "Wafer Na Effects on CMP: Experimental Validation of Modeling Methods." San Francisco, California Research Society Spring Meeting. Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Re Automated Image Retrieval System (Abstract)." Advanced Semiconductor Manufacturing Content Image Retrieval System (Abstract). "Advanced Semiconductor Manufacturing Content Image Retrieval System (Abstract)." 51st Electronic Components Manufacturing (Abstract)." 51st Electronic Components Manufacturi	DUP
March 5, 2001. "KLA-Tencor Introduces First Production-worthy Copper CMP In-situ Film point Control System." http://www.kla-tencor.com/j/servlet/NewsItem?newsItemID=74. Lee, Brian, Duane S. Boning, Winthrop Baylies, Noel Poduje, Pat Hester, Yong Xia, John V Koliopoulus, Dale Hetherington, HongJiang Sun, and Michael Lacy. April 2001. "Wafer Na Effects on CMP: Experimental Validation of Modeling Methods." San Francisco, California Research Society Spring Meeting. Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Re Automated Image Retrieval System (Abstract)." Advanced Semiconductor Manufacturing Content Image Retrieval System (Abstract). "Advanced Semiconductor Manufacturing Content Image Retrieval System (Abstract)." 51st Electronic Components Manufacturing (Abstract)." 51st Electronic Components Manufacturing (Abstract). "51st Electronic Components Manufacturing (Abstract)." 51st Electronic Components Manufacturi	
 Koliopoulus, Dale Hetherington, HongJiang Sun, and Michael Lacy. April 2001. "Wafer Note Effects on CMP: Experimental Validation of Modeling Methods." San Francisco, California Research Society Spring Meeting. Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Research Image Retrieval System (Abstract)." Advanced Semiconductor Manufacturing Control IEEE/SEMI, Munich, Germany. Tan, K. K., H. F. Dou, and K. Z. Tang. May-June 2001. "Precision Motion Control System Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Electronic Components Manufacturing (Abst	
Tobin, K. W., T. P. Karnowski, L. F. Arrowood, and F. Lakhani. April 2001. "Field Test Re Automated Image Retrieval System (Abstract)." Advanced Semiconductor Manufacturing Control System (Semiconductor and Electronic Components Manufacturing (Abstract)." 51st Ele	anotopography
Semiconductor and Electronic Components Manufacturing (Abstract)." 51 st Electronic C	
Modeling for Control of CMP Removal Uniformity." Solid State Technology, Vol. 44, No. (106. Cowan Publ. Corp.: Washington, D.C. July 5, 2001. "Motorola and Advanced Micro Devices Buy ObjectSpace Catalyst Advanced	
Product for Five Wafer Fabs." Semiconductor FABTECH. www.semiconductorfabtech.com/industry.news/9907/20.07.shtml	Process Control
Heuberger, U. September 2001. "Coating Thickness Measurement with Dual-Function Edd-Magnetic Inductance Instrument (Abstract)." <i>Galvanotechnik</i> , vol. 92, no. 9, pp. 2354-2366-	+IV.
Pilu, Maurizio. September 2001. "Undoing Page Curl Distortion Using Applicable Surfaces International Conference on Image Processing. Thessalonica, Greece.	
October 15, 2001. Search Report prepared by the Austrian Patent Office for Singapore Paten 200004286-1.	nt Application No.
Wang, LiRen and Hefin Rowlands. 2001. "A Novel NN-Fuzzy-SPC Feedback Control System International Conference on Emerging Technologies and Factory Automation, pp. 417-423.	em." 8 th IEEE
NovaScan 2020. February 2002. "Superior Integrated Process Control for Emerging CMP F. Applications."	High-End
March 15, 2002. Office Action for U.S. Serial No. 09/469,227, filed December 22, 1999.	
March 29, 2002. Office Action for U.S. Serial No. 09/363,966, filed July 29, 1999.	
Moyne, J., V. Solakhian, A. Yershov, M. Anderson, and D. Mockler-Hebert. April-May 200 and Deployment of a Multi-Component Advanced Process Control System for an Epitaxy To 2002 IEEE Advanced Semiconductor Manufacturing Conference and Workshop, pp. 125-130	ool (Abstract)."
Sarfaty, Moshe, Arulkumar Shanmugasundram, Alexander Schwarm, Joseph Paik, Jimin Zha Martin J. Seamons, Howard Li, Raymond Hung, and Suketu Parikh. April-May 2002. "Adv. Control Solutions for Semiconductor Manufacturing." Boston, Massachusetts: 13 th Annual II Advanced Semiconductor Manufacturing Conference. Advancing the Science and Technology Manufacturing. ASMC 2002, pp. 101-106.	ance Process EEE/SEMI
EXAMINER DATE CONSIDERED	

SHEET 25 OF 27

	SHI	EET <u>25</u> OF <u>27</u>
INFORMATION DISCLOSURE	ATTY. DOCKET NO.	SERIAL NO.
CITATION IN AN	008063 USA MTCG/PINTGR	10/812,480
APPLICATION		
(PTO-1449)		
(110-1449)	APPLICANT	
	Deenesh PADHI et al.	
	FILING DATE	GROUP
	March 30, 2004	
OTHER ART (Including Author	, Title, Date, Pertinent Pages, Etc.)	
Campbell, W. J., S. K. Firth, A. J. Toprac, and T Algorithms (Abstract)." <i>Proceedings of 2002 An</i>		
Good, Richard and S. Joe Qin. May 2002. "Stat	oility Analysis of Double EWMA Run	n-to-Run Control with
Metrology Delay." IEEE/CPMT International E		
Smith, Stewart, Anthony J. Walton, Alan W. S. F. 2002. "Evaluation of Sheet Resistance and Elect		
Damascene Interconnect." IEEE Transactions of		
Johnson, Bob. June 10, 2002. "Advanced Proce		
June 20, 2002. Office Action for U.S. Serial No.	09/619,044, filed July 19, 2000.	
July 9, 2002. International Search Report for PC	T/US01/24910.	
July 23, 2002. Communication Pursuant to Artic	le 96(2) EPC for European Patent Ap	plication No.
00 115 577.9.	GTP# 1001 107 107	* * ***
July 29, 2002. International Search Report for Po		000
September 26, 2002. Office Action for U.S. Seri	-	000.
October 4, 2002. International Search Report for		
October 15, 2002. International Search Report fo		
October 23, 2002. International Search Report for		
October 23, 2002. Office Action for U.S. Serial		999.
November 7, 2002. International Search Report		
November 11, 2002. International Search Report	for PCT/US02/19117.	
November 12, 2002. International Search Report	for PCT/US02/19063.	
December 17, 2002. Office Action for U.S. Seria	al No. 09/363,966, filed July 29, 1999	
ACM Research, Inc. 2002. "ACM Ultra ECP® www.acmrc.com/ecp.html	System: Electro-Copper Plating (ECF	') Deposition."
Applied Materials, Inc. 2002. "Applied Material www.appliedmaterials.com/products/copper_elections."		Electrochemical Plating.
KLA-Tencor Corporation. 2002. "KLA Tencor: Worthy Copper CMP In-Situ Film Thickness and Shipped to Major CMP Tool Manufacturer." www.kla-tencor.com/news_events/press_releases	Press Release: KLA-Tencor Introduction End-point Control System: Multi-M	illion Dollar Order
Sonderman, Thomas. 2002. "APC as a Competi AEC/APC.		
XAMINER	DATE CONSIDERED	W. 181 M. 18

SHEET 26 OF 27

			Less 20 OF 21
Cľ	ATION DISCLOSURE TATION IN AN APPLICATION	ATTY. DOCKET NO. 008063 USA MTCG/PINTGR	SERIAL NO. 10/812,480
	(PTO-1449)	1	
	,	APPLICANT	
		Deenesh PADHI et al.	
		FILING DATE	GROUP
		March 30, 2004	
	OTHER ART (Including Author,	Title, Date, Pertinent Pages, Etc.)	
Hiroshi Y	ni, Shingo, Kaori Tai, Hiizu Ohtorii, Nao Yamada, Masao Ishihara, and Takeshi No ectro-Chemical Polishing." 2002 Sympo.	gami. 2002. "Fragile Porous Low-l	k/Copper Integration by
2002. "M	1icrosense II – 5810: Non-Contact Capac	citance Gaging Module." www.adete	ch.com.
February	10, 2003. Office Action for U.S. Serial	No. 09/619,044, filed July 19, 2000.	
March 25	, 2003. International Search Report for	PCT/US02/24859.	
April 9, 2	2003. Office Action for U.S. Serial No. (09/928,474, filed August 14, 2001.	
May 8, 20	003. Office Action for U.S. Serial No. 0	9/637,620, filed August 11, 2000.	
May 23, 2	2003. Written Opinion for PCT/US01/24	4910.	
June 18, 2	2003. Office Action for U.S. Serial No.	09/655,542, filed September 6, 2000	•
Internatio	2003. Invitation to Pay Additional Fees a anal Search for PCT/US02/19116.		Results of the Partial
August 1,	2003. Written Opinion for PCT/US01/2	27406.	
August 8,	2003. PCT International Search Report	from PCT/US03/08513.	
August 20	0, 2003. Written Opinion for PCT/US01	/22833.	
	5, 2003. Office Action for U.S. Serial No.		
Septembe	er 15, 2003. Office Action for U.S. Seria	l No. 09/928,474, filed August 14, 2	001.
14 October	er 2003. PCT International Search Repor	t from PCT/US02/21942.	
	er 2003. PCT International Search Repor		
23 October	er 2003. PCT International Preliminary l	Examination Report from PCT/US01	/24910.
Novembe	r 5, 2003. Office Action for U.S. Serial	No. 10/172,977, filed June 18, 2002.	
December	r 1, 2003. Office Action for U.S. Serial	No. 10/173,108, filed June 18, 2002.	
	pper wafer nanotopography measuremer w.phase-shift.com/nanomap.shtml.	nt by ADE Phase Shift." Printed Dec	cember 9, 2003.
shift.com/	atness measurement of advanced wafers. wafer-flatness.shtml.		
	chnologies, Inc 6360." Printed Decem	<u>-</u>	
shift.com/	al profilometer MicroXAM by ADE Pha microxam.shtml.		<u> </u>
http://www	pper FA factory automation wafer nanot w.phase-shift.com/nanomapperfa.shtml.		
December	11, 2003. Office Action for U.S. Serial	No. 09/943,383, filed August 31, 20	001.
EXAMINER	I	DATE CONSIDERED	
VAMINED. Initial if account			

SHEET 27 OF 27

INFORMATION DISCLOSURE	ATTY. DOCKET NO.	SERIAL NO.
CITATION IN AN	008063 USA MTCG/PINTGR	10/812,480
APPLICATION		
(PTO-1449)		
	APPLICANT	
'n	Deenesh PADHI et al.	
	FILING DATE	GROUP
	March 30, 2004	•
	or, Title, Date, Pertinent Pages, Etc.)	
December 16, 2003. International Search Rep		
January 20, 2004. Office Action for U.S. Seri		l
January 23, 2004. International Search Report		
February 2, 2004. Office Action for U.S. Serie		
Adams, Bret W., Bogdan Swedek, Rajeev Baj. Wafer Endpoint Detection Improves Process C Applied Materials, Inc., Santa Clara, CA.	Control in Copper CMP." Semiconducto	r Fabtech – 12th Edition.
Berman, Mike, Thomas Bibby, and Alan Smit Semiconductor Fabtech, 8th Edition, pp. 267-2	74.	
Dishon, G., D. Eylon, M. Finarov, and A. Shul Integrated Monitoring." Ltd. Rehoveth, Israel	: Nova Measuring Instruments.	
"Semiconductor Manufacturing: An Overview	." <http: o<="" td="" users.ece.gatech.edu="" ~gmay=""><td>verview.html></td></http:>	verview.html>
EXAMINER	DATE CONSIDERED	